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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/539,996	06/17/2005	Yuqi Zhang	113124-01US	1200

27189 7590 12/01/2008

PROCOPIO, CORY, HARGREAVES & SAVITCH LLP
530 B STREET
SUITE 2100
SAN DIEGO, CA 92101

EXAMINER	
MULLER, BRYAN R	

ART UNIT	PAPER NUMBER
3727	

NOTIFICATION DATE	DELIVERY MODE
12/01/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketing@procopio.com
PTONotifications@procopio.com

Office Action Summary	Application No.	Applicant(s)	
	10/539,996	ZHANG, YUQI	
	Examiner	Art Unit	
	BRYAN R. MULLER	3727	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 August 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5* is/are rejected.

7)☒ Claim(s) *6-8* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 June 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang (CN 2522029 Y) in view of Xu (WO 0150939; U.S. 6,634,674 referenced as U.S. translation; cited WO publication on US Patent is incorrect, above WO reference is the corresponding publication to the actual U.S. Patent).

3. In reference to claim 1, Zhang discloses an outer pipe (8), an inner pipe (1) received in said outer pipe, the inner pipe having an outer surface and an inner surface and being provided axially with a row of detent holes (9), a locking device (4-7) having a detent pin (6) for positioning said inner pipe with respect to said outer pipe, a guiding bush (2) attached to said outer pipe, a first guiding member (11) disposed at the guiding bush, a second guiding member (groove 12) attached to said inner pipe, being engagable and slidable with said first guiding member so that the inner pipe and said outer pipe can move axially with respect to each other and wherein the detent pin of the locking device is inserted into one of said detent holes when said locking device is in a locking state (Fig. 1) and disengages the detent hole when said locking device is in an unlocking state (Fig. 2). However, Zhang fails to disclose that the detent holes

penetrate through the wall of the inner pipe from said outer surface to said inner surface or that the inner pipe has a *separate* inner liner layer fixed to the inner surface for isolating vacuum of the inner pipe from the detent holes. Xu discloses a similar telescopic suction tube for a vacuum cleaner having inner and outer pipes and a locking device to lock the inner and outer pipes in position relative to one another and Xu further discloses an actuating mechanism for moving the locking device from a locking state to an unlocking state by an actuating element (9) that is located at an end of the inner pipe that is distal from the outer pipe. Xu discloses several embodiments including a third embodiment (Fig. 5) wherein a rack (1) including detent holes (11) is formed as part of the inner pipe (6), the detent holes penetrating through the rack of the inner pipe from an outer surface to an inner surface and the inner pipe (6) having a separate inner liner wall (A in Figs. X and Y below) that is secured in a fixed position to the inner surface of the inner pipe (6) by collar (8) and will isolate the vacuum of the inner pipe from the rack and the detent holes wherein a control rod (7) for moving locking member (4) into or out of a locked position is slidably disposed between the rack of the inner tube and the inner liner wall for controlling the locking mechanism. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the suction tube of Zhang with a similar actuating mechanism, as taught by Xu, to allow a user to alternatively move the locking device from a locking state to an unlocking state to move the inner and outer pipes relative to one another either by engaging the locking device (4-7) of Zhang on the outer pipe or by engaging the actuating element (9) of Xu on the end of the inner pipe, which will allow a

user to adjust the length of the suction tube by whichever mechanism is more convenient during use when starting or finishing use of the suction tube. Therefore, it would have been obvious to one of ordinary skill in the art the detent holes of Zhang to pass through the wall of the inner pipe to allow the detent pin to engage corresponding openings (12) of the control rod (7) and to provide the inner pipe of Zhang with a separate inner liner layer (similar to A below) that is fixed to the inner surface thereof and will obviously isolate vacuum pressure of the inner pipe from the detent holes and allow the control rod (7) to be slidably positioned between the rack of the inner pipe and the inner liner layer.

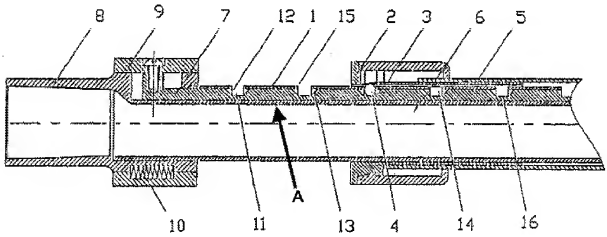

Fig. X (from Fig. 1 of Xu)

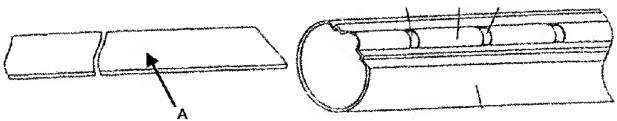

Fig. Y (from Fig. 5 of Xu)

4. In reference to claims 2 and 3, Zhang clearly discloses that the locking device comprises a detent pin boss (3) fixed to said guiding bush (2), a spring (5) connected to detent pin (6), a detent shifting fork (10) whose end is connected to the detent pin and the middle part thereof is connected rotatably to the detent boss, a casing (4) having a hatch at its side and the other side of the detent shifting fork extending out of the hatch of the casing to form a button (7).

5. In reference to claims 4 and 5, Zhang further discloses that the second guiding member is a guiding slot (12) axially disposed at the outside surface of said inner pipe, said detent holes are disposed at said guiding slot and said first guiding member is a guiding rib (11) axially disposed at the inside wall of said guiding bush and slidably moved within said guiding recess.

Allowable Subject Matter

6. Claims 6-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record (considered as a whole) neither anticipates nor renders obvious the vacuum suction tube disclosed by the applicant wherein the inner liner layer is a liner tube with a groove extending axially along the inner liner tube facing the detent holes in combination with the rest of the claimed limitations set forth in the independent

claim 1. In providing the apparatus of Zhang with an alternative locking and control apparatus, as taught by Xu, there would be no motivation to provide the inner liner layer in the form of a tube or to provide an inner liner tube with a groove extending along the tube and facing the detent holes because there would be no need for a groove to support the control rod 7.

Response to Arguments

8. Applicant's arguments with respect to claims 1-5 have been considered but are moot in view of the new ground(s) of rejection. Although the Examiner indicated that the amendments to the claims had overcome the rejection of claims 1-8 under 35 U.S.C. 103(a) over Zhang in view of Xu, after further consideration, the Xu reference provides alternative embodiments that *do* provide an inner pipe and inner liner layer that are secured at a fixed position relative to one another and provides motivation to improve the Zhang apparatus with addition of a similar structure. Thus, although the rejections are made over Zhang in view of Xu, the rejections are considered to be new grounds of rejection.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kim (6,454,308) discloses a suction tube having similar structure and function as the applicant's claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRYAN R. MULLER whose telephone number is (571)272-4489. The examiner can normally be reached on Monday thru Friday 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Monica S. Carter can be reached on (571) 272-4475. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Bryan R Muller/
Examiner, Art Unit 3727
11/20/2008